

Remarks

The claims were amended in accordance with the amendments above. The amendments to the claims are being made merely to clarify the invention. All of the amendments are fully supported by the specification, claims, and figures as originally filed. No new matter is believed or intended to be involved.

§103 Rejections

In the Office Action dated 04/01/2010, claims 1-3, 11, 13-19, 21-25, and 27 were rejected under 35 U.S.C. §103(a) as being obvious over Finkenzeller et al. (U.S. 5,954,667) in view of John et al. (2001) (U.S. 2001/0049480). Claims 4-6, 8-10, and 30-32 were rejected under 35 U.S.C. §103(a) as being obvious over Finkenzeller et al. in view of John et al. (2001), and further in view of Lencioni, Jr. (U.S. 4,219,028). Claims 7 and 20 were rejected under 35 U.S.C. §103(a) as being obvious over Finkenzeller et al. in view of John et al. (2001). Claims 12 and 29 were rejected under 35 U.S.C. §103(a) as being obvious over Finkenzeller et al. in view of John et al. (2001) and further in view of Zoth et al. (U.S. 6,786,873). Claims 26 and 28 were rejected under 35 U.S.C. §103(a) as being obvious over Finkenzeller et al. in view of John et al. (2001) and further in view of John (2005) (U.S. 2005/0018858).

Under MPEP 2143.03, in order to establish a *prima facie* case of obviousness, the Office must give due consideration to all of the limitations of a claim. Obviousness rejections “cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1395-97 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). For at least the reasons set forth below, Applicant respectfully submits that the combined art of record fails to render any of the present claims obvious.

Applicant submits that the art of record fails to teach or suggest all of the limitations recited in each independent claim in accordance with MPEP 2143.03. For instance, Applicant notes that amended independent claim 1 recites “the reference active electrode includes a local amplifier co-located with the reference active electrode such that the local amplifier co-located with the reference active electrode is also attached relative to the frame as an integral part of the

reference active electrode, wherein the local amplifier co-located with the reference active electrode is operable to amplify signals sensed by the reference active electrode.” Similarly, amended claim 1 also recites “the signal active electrode includes a local amplifier co-located with the signal active electrode such that the local amplifier co-located with the signal active electrode is also attached relative to the frame as an integral part of the signal active electrode, wherein the local amplifier co-located with the signal active electrode is operable to amplify signals sensed by the signal active electrode.” These limitations, among others recited in amended claim 1, are neither taught nor suggested by the combined art of record.

To the extent that any of the cited references purport to teach active electrodes, none of the references individually or in combination teach amplifiers that are co-located with the active electrodes. For instance, in Finkzeller et al., an amplifier is provided in a box (40) that is not co-located with electrodes. See, e.g., FIG. 1 and col. 3, ll. 52-55 of Finkzeller et al. In John et al. (2001), the amplifiers are clearly remote relative to the electrodes. See, e.g., FIG. 1a of John et al. (2001). Even in combination with each other and in combination with both Finkzeller et al. and John et al. (2001), the remaining prior art references fail to make up for these deficiencies of the combination of Finkzeller et al. and John et al. (2001). Applicant therefore submits that the combined art of record fails to teach or suggest all of the limitations of amended claim 1 in accordance with MPEP 2143.03. Accordingly, Applicant respectfully submits that the combined art of record fails to render present claim 1 obvious in accordance with MPEP 2143, and respectfully requests that the rejection be withdrawn.

Amended independent claim 23 recites “detecting whether the sensed electrode voltage exceeds a threshold, wherein the act of generating the auditory stimulus further comprises imposing a sampling delay in pursuit of a resting brain state in response to determining that the sensed electrode voltage exceeds a threshold.” These limitations, among others recited in amended claim 23, are neither taught nor suggested by the combined art of record.

In rejecting similar subject matter previously recited in claim 26 (which has been cancelled), the Office cited paragraph [0076] of John (2005) as teaching a sampling time delay. To the extent that John (2005) vaguely suggests some notion of a delay, John (2005) fails to teach or suggest an act of detecting whether the sensed electrode voltage exceeds a threshold and

imposing a delay in pursuit of a resting brain state when the voltage does exceed a threshold as recited in amended claim 23. Even in combination with John (2005) and in combination with each other, the remaining references fail to make up for this deficiency of John (2005). Applicant therefore submits that the combined art of record fails to teach or suggest all of the limitations of amended claim 23 in accordance with MPEP 2143.03. Accordingly, Applicant respectfully submits that the combined art of record fails to render present claim 23 obvious in accordance with MPEP 2143, and respectfully requests that the rejection be withdrawn.

New independent claim 33 recites “monitoring the AER data for the presence of an artifact; and in response to determining the AER data to contain an artifact, imposing a sampling delay and repeating an epoch of auditory stimulus and sampling AER data.” These limitations, among others recited in new claim 33, are neither taught nor suggested by the combined art of record. In rejecting similar subject matter recited in claim 28, the Office again cited paragraph [0076] of John (2005). A careful reading of paragraph [0076] in John (2005) reveals no teaching or suggestion of an act of monitoring for the presence of an artifact and repeating an epoch when it is determined that AER data contains an artifact as recited in new claim 33. Even in combination with John (2005) and in combination with each other, the remaining references fail to make up for this deficiency of John (2005). Applicant therefore submits that the combined art of record fails to teach or suggest all of the limitations of amended claim 33 in accordance with MPEP 2143.03.

Applicant further notes that the dependent claims include additional limitations not taught or suggested in the art of record, thus forming independent basis for non-obviousness.

### Conclusion

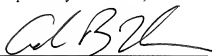
While several distinctions have been noted over the art of record, Applicant notes that there are several other limitations recited in the present claims which are neither taught nor suggested by the art of record. Applicant expressly reserves all rights and arguments with respect to distinctions not explicitly noted herein. In addition, to the extent that the amendments constitute a narrowing of the claims, such narrowing of the claims should not be construed as an admission as to the merits of the prior rejections. Indeed, Applicant traverses the rejections and preserves all rights and arguments. To the extent that any particular statement or argument by

the Office in the pending Office Action has not been explicitly addressed herein, the same should not be construed as an acquiescence or admission by the Applicant that such statements or arguments by the Office are accurate or proper.

Based on the foregoing, all pending claims are in a condition for allowance. Accordingly, Applicant respectfully requests reconsideration and an early notice of allowance. Should the Examiner wish to discuss the amendments or arguments made herein, Applicant invites the Examiner to contact the undersigned at (513) 369-4811 or via e-mail at [aulmer@fbtlaw.com](mailto:aulmer@fbtlaw.com).

The Commissioner for Patents is hereby authorized to charge any deficiency, including any fees required for an extension of time not already paid for or any other required fees not already paid for, or to credit any overpayment of fees, to Frost Brown Todd LLC Deposit Account No. 06-2226.

Respectfully Submitted,



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